HW#83: Right Triangle Problems

Geometry

Due: Friday, Feb 20th

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP:\_\_\_\_\_

FAILURE TO WRITE IN COMPELTE SENTENCES OR SHOW ALL WORK WILL RESULT IN LASALLE.

Directions

1. Complete any classwork problems not finished in class.
2. Finish the right triangle problems below using any of the right triangle methods or strategies you know: (1)Pythagorean Theorem, (2) special right triangles, and (3) trig.

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| 1. A ladder leans against a building. The foot of the ladder is 6 feet from the building. The ladder reaches a height of 14 feet on the building. Find the length of the ladder to the nearest foot.   http://regentsprep.org/Regents/math/ALGEBRA/AT2/ladderpic.gif  Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Method Used \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. From a point on the ground 25 feet from the foot of a tree, the angle of elevation of the top of the tree is 32º. Find the height of the tree to the nearest foot.   Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Method Used \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ http://regentsprep.org/Regents/math/ALGEBRA/AT2/tree.gif |
| 1. he isosceles right triangle to the right has a leg that measures 12 inches. What is the length of the hypotenuse in simplified radical form?   Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Method Used \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_http://cimg2.ck12.org/datastreams/f-d%3A4bdd4b72961cb4cf7bf879f4054e09b5e934db4b2d723834f0e70cc5%2BIMAGE%2BIMAGE.1 | 1. In right triangle ∆ABC,  and ∠B is a right angle. Draw and  label a figure. What is the length of side BC?   Answer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Method Used \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Part II – Review

Review is a chance for YOU to practice skills that we have already learned through out the year.

Choose 4 of the 6 problems below and complete them as your review.

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| 1. Find the missing side labeled *x*. Your answer should be in simplified radical form or a whole number.  ../../../../../Desktop/Screen%20Shot%202016-02-15%20at%209.55.44%20AM | 1. Solve for *x* and *y*. ../../../../../Desktop/Screen%20Shot%202016-02-15%20at%209.55.48%20AM |
| 1. Simplify. Your answer should contain only positive exponents. ../../../../../Desktop/Screen%20Shot%202016-02-15%20at%209.56.09%20AM | 1. a) Find the slope of the line.  b) Write the equation for the line in slope-intercept form.  ../../../../../Desktop/Screen%20Shot%202016-02-15%20at%209.56.11%20AM |
| 1. Find the area and perimeter of the shape below. | The base of an isoceles triangle is 6 cm. Find the measure of the other two sides if the perimeter is 50 cm. |